

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

ATTORNEY DOCKET NO. CONFIRMATION NO. FIRST NAMED INVENTOR APPLICATION NO. **FILING DATE** Chien-Sheng Yang 10/709,090 3089 04/13/2004 12029-US-PA **EXAMINER** 31561 7590 07/06/2005 JIANQ CHYUN INTELLECTUAL PROPERTY OFFICE DUDEK, JAMES A 7 FLOOR-1, NO. 100 PAPER NUMBER **ART UNIT** ROOSEVELT ROAD, SECTION 2 TAIPEI, 100 2871 **TAIWAN** DATE MAILED: 07/06/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)	
	10/709,090	YANG, CHIEN-SHENG	
Office Action Summary	Examiner	Art Unit	
	James A. Dudek	2871	
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address	
A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply - If NO period for reply is specified above, the maximum statutory period w - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	36(a). In no event, however, may a reply be ting within the statutory minimum of thirty (30) day will apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	mely filed s will be considered timely. the mailing date of this communication. CD (35 U.S.C. § 133).	
Status			
1) Responsive to communication(s) filed on	•		
2a) ☐ This action is FINAL . 2b) ☑ This	☐ This action is FINAL. 2b) ☐ This action is non-final.		
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is			
closed in accordance with the practice under E	x parte Quayle, 1935 C.D. 11, 4	53 O.G. 213.	
Disposition of Claims			
 4) ☐ Claim(s) 1-19 is/are pending in the application. 4a) Of the above claim(s) is/are withdraw 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 1-19 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and/or 	vn from consideration.		
Application Papers			
9) The specification is objected to by the Examine 10) The drawing(s) filed on is/are: a) accent Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct 11) The oath or declaration is objected to by the Examine	epted or b) objected to by the large drawing (s) be held in abeyance. See ion is required if the drawing (s) is objected to by	e 37 CFR 1.85(a). ejected to. See 37 CFR 1.121(d).	
Priority under 35 U.S.C. § 119			
 12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of: 1. Certified copies of the priority documents 2. Certified copies of the priority documents 3. Copies of the certified copies of the priority application from the International Bureau * See the attached detailed Office action for a list 	s have been received. s have been received in Application in the second	ion No ed in this National Stage	
Attachment(s)			
1) Notice of References Cited (PTO-892)	4) Interview Summary		
2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date S. Patent and Trademark Office	Paper No(s)/Mail Da 5) Notice of Informal F 6) Other:	ate Patent Application (PTO-152)	

Application/Control Number: 10/709,090

Art Unit: 2871

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over US005260818A ("818").

818 teaches a scan line disposed over a substrate [12]; a data line disposed over a substrate [14]; an active component [20]; a plurality of capacitance electrodes [52]; a pixel electrode disposed over the transparent capacitance electrode and connected to the active component, the pixel and capacitance electrode forming a capacitor. 818 lacks an explicit teaching that the capacitance electrode is ITO or IZO. However, it was well known to form capacitance electrode from ITO or IZO in order to increase the aperture ratio of the cell. Accordingly, it would have been obvious to one of ordinary skill at the time of invention to form the capacitance electrode of 818 from the well known ITO.

Per claim 2-3, the capacitance forms a capacitor with the pixel and is thus inherently electrically connected to the TFT.

Per claim 4, the TFT is formed of amorphous or poly silicon [see column 1, line 36]. 818 lacks the use of low temp poly silicon. However, it was well known to form TFTs from low temp poly silicon as the process requires less heat. Accordingly, it would have been obvious to one of ordinary skill at the time of invention to form the TFT of 818 using a low temp poly silicon process.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James A. Dudek whose telephone number is 571-272-2290. The examiner can normally be reached on 9:00-5:30.

Art Unit: 2871

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert H. Kim can be reached on 571-272-2293. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Primes A. Dudek Primary Examiner Art Unit 2871